

1 Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminder of January 1, 2013 Deadline for Transition to Narrowbanding Operations in the 150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters, DA 11-189, released July 13, 2011.

I. BACKGROUND

The City of Houston operates two Citywide Communications Systems that includes emergency and non-emergency dispatching for the City of Houston and surrounding metro areas within its boundaries.

Included in the City's communications systems are two extensive radio communications networks utilized by approximately 5,400 police officers and 3,900 fire fighters and emergency medical service responders to protect the lives and property of the five million nine hundred fifty thousand (5,950,000) residents and travelers within the Houston Metro area. Located in southeast Texas, the City covers 8,778 square miles largely situated within Harris County. The sprawling nature of the City of Houston and its nearly 6 million metro-area residences makes two-way public-safety radio communications something of a challenge that has necessitated future development of forty-eight (48) new or modified tower sites strategically located across the City.

Currently, the City's Police Department is operating on an analog conventional 25 kHz LMR communications system, using sixteen Part 90 UHF channels. The City's Fire Department is operating on an analog conventional 25 kHz LMR communications system, using eight Part 90 UHF Channels. The City's Emergency Medical Response Department is operating on an analog conventional 25 kHz LMR communications system, using eight Part 90 UHF Channels. The current number of mobile and portable subscriber radios, of various ages, on the system is approximately ten-thousand seven hundred thirty five (10,735) subscriber units. Those units are operating on (Houston Fire Department has a 4 site simulcast UHF system with 23 associated receiver sites. Houston Police Department has 7 transmitter sites and 27 associated receiver sites in a Zoned UHF channel system) All ten-thousand seven hundred thirty five (10,735) subscribers units will be exchanged for new 700 MHz Digital units. The base radios and system infrastructure are also of various age dating back to the early 1980's and are almost universally not capable of being converted to operate in 12.5 kHz mode.

The City has contracted for and is in the process of implementing a new 700 MHz Project 25 Digital Public Safety Radio Communications network that will serve the City's Police, Fire and Emergency Operations.

The City of Houston is aware of the Commission's narrowbanding requirements for the UHF communications system. As a result, the City has conducted outside studies as well as discussions with various local emergency service providers and groups to develop the most suitable course of action. With that said, the City is well in to the planning, construction and implementation process as detailed below. The City is committed to meeting these narrowbanding requirements. For the reasons of the age of the City's existing communications equipment and the need for improved interoperability, coverage, features, capacity and capability offered by new state of the art mission critical communications networks, the City has made the decision to implement a Project 25 Phase II TDMA fully digital Public Safety Radio Communications system operating in the 700MHz band. The City's goal is to replace the aging UHF systems with the new Project 25 Phase II TDMA system to enhance the two-way mission

critical communications throughout the City for the benefit and safety of life and property of all public safety and government users, and the citizens that are served.

Contingent upon the completion of the implementation of the new Project 25 Public Safety Radio Communications system, agencies will be to migrated to the new system and away from the existing UHF communications systems currently in use. New subscriber mobile and portable radios that are Project 25 capable have been procured and are currently being readied with the latest software release for use by Public Safety agencies. Regardless of migration this new implementation will allow the City to migrate to more efficient spectrum use in the 700 MHz band and thereby meet the Commission's underlying goals of its narrowband order.

In DA 11-1189, the Commission provided guidance to licensees for submission of Requests for Waiver of the narrowband deadline. It emphasized that Requests for Waiver of the deadline will be subject to a high level of scrutiny under the waiver standard set forth in Section 1.925 of the Commission's rules, which requires the waiver petitioner to demonstrate either that "(i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the waiver would be in the public interest; or (ii) [i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.

Relevant to the Commission's assessment of the Waiver Request, it recommended that petitioners provide addressing the following to show that the waiver Request has met the Commission's waiver standard under Section 1.925:

- Steps already taken to plan for, initiate, and complete the transition to narrowband operations
- System size and complexity
- Whether system equipment is narrowband-capable or must be replaced or upgraded
- Whether the licensee plans additional system upgrades or improvements in addition to converting to narrowband operation
- Funding sources, including whether the licensee's budget requires government approval or a multi-year budget process
- Whether the licensee's narrowbanding schedule is affected by neighboring systems due to interoperability relationships or other interdependencies
- Plans to minimize the negative impact of extended wide band operations on co-channel and adjacent channel operations, including a description of the spectrum environment in the affected area

2 47.C.F.R. §§ 1.925(b)(3)

3 DA 11-189, released July 13,2011, page 3.

- The City has always intended to give back some of its UHF and VHF frequencies once the project is over.

The Commission further requested that licensees should provide a proposed timetable for completion of narrowbanding that includes the following elements:

- What steps in the process have been or will be taken prior to January 1, 2013
- Anticipated dates of commencement and completion of:
- Replacement or retuning of mobiles/portables
- Infrastructure replacement or retuning

When addressing the above factors, the Commission recommend that licensees explain how (i) they have worked diligently and in good faith to narrowband their systems expeditiously; (ii) their specific circumstances warrant a temporary extension of the deadline; and (iii) the amount of time for which a waiver is requested is no more than is reasonably necessary to complete the narrowbanding process.

II. NARROWBANDING STEPS TAKEN TO DATE OR PRIOR TO JANUARY 1, 2013

The City implemented and completed a number of specific steps to date and is committed to completing additional steps by year end toward meeting the Commission's narrowband requirements, including but not limited to the following:

1. Completed a thorough analysis of all existing mobile and portable subscriber radios and base station radio equipment to determine the existing capacity and capability of current radio equipment to migrate to and operate in 12.5 kHz mode via a software update.
2. Completed a citywide coverage and capacity analysis and developed a full Request for Proposal (RFP) to solicit offers on a new Project 25 Phase II TDMA system operating within the 700 MHz band. The RFP resulted provided a system design once implemented would incorporate forty-eight (48) new or updated communications sites providing 95% coverage within the City limits of the City of Houston. The system being implemented will operate on 76 700 MHz channels. The system will have two fully redundant Master sites serving four (4) simulcast cells and six (6) remote sites operating in both transmit and receive mode on all channels.
3. Developed a detailed plan and project completion schedule to migrate to a countywide interoperable Project 25 network, and obtained vendor detailed pricing proposal to design, implement and install the system, including option for new subscriber equipment, and provide ongoing maintenance services. See the project timetable below.

4. Developed and secured the funding process to complete the project with City of Houston Council approval. Funding is in place to complete the project.
5. City has issue a contract with the chosen vendor whom is fully engaged in the implementation of the Project 25 system.
6. System design is complete and approved by the City, and all site and infrastructure equipment is fully built out with testing nearing completion.
7. All new subscriber equipment has been purchased but will need to be upgraded in the field. This effort is anticipated to last at least 90 plus days.

III. PROPOSED AND UPDATED TIMETABLE FOR COMPLETION OF NARROWBANDING

Pursuant to the Section 1.925 of the FCC rules, the City has no other viable alternative than to proceed with the plans currently in place, as detailed in the updated Project Milestones Timetable below. The City was prepared to cutover all of its users by the December 2012 timeline. However, during the Coverage testing phase of the project, Motorola made the City aware of software issues its new TDMA subscriber radios. Motorola is working with the City to upgrade and re-program over 12,000 units. 4000 mobile units are already deployed in the field. The initial Project Milestones Timetable needed to be modified to show the adjusted cut over dates beyond what the City had anticipated. Because of the software issue, there is insufficient time to properly complete the final programming efforts required to ensure a safe and efficient cutover of Public Safety users to the Project 25 Phase II Public Safety Radio system, or effectively plan and execute an alternative approach that would satisfy the January 1, 2013 deadline. Subscriber radios must be programmed with the latest software release before the City can move off the existing UHF systems in place today. The City's decision to move Public Safety to a new 700 MHz Project 25 system for our first responders will provide effective and reliable communications network that will promote safety of life and property, and would be in the public interest. Failure to provide the system in lieu of another narrowbanding alternative will be inequitable, unduly burdensome and contrary to public interest.

<u>Project Milestone</u>	<u>Planned Completion Date</u>	<u>Proposed Completion Date</u>
Contract Award	October 2008	October 2008
Infrastructure Delivered & Operational	August 2012	August 2012
Infrastructure & Coverage Acceptance Testing Completed & Accepted	October 2012	December 2012
Infrastructure Test Documents Submitted and Approved	November 2012	December 2012
Subscriber Radio Reprogram	October 2012	February 2013
Public Safety Cutover Complete	December 2012	March 2013
Required Buildings Coverage Testing Completed	March 2013	March 2013
System Acceptance – Complete Transition of Additional City Agencies	April 2013	April 2013
Final Project Acceptance	August 2013	August 2013

IV. REQUEST FOR WAIVER

The City of Houston, Texas has planned for the replacement of its aging communications system and is committed to meeting the FCC's narrowbanding requirements as defined in this Request for Waiver. The City fully expects to meet this mandatory narrowbanding requirement as quickly as possible, in line with the above project completion schedule. Because most of our system infrastructure equipment is not capable of conversion to 12.5 kHz operation, we are in the process of replacing our system with a fully digital 700 MHz Project 25 multi-simulcast system.

All existing infrastructure, including (but not limited to) base stations, antennas, and coax systems, will be replaced by the new state of the art Project 25 Phase II equipment operating in the 700MHz band. To further ensure future use and protection of the City's investment, the City is working with outside agencies to allow them future access to the Project 25 system. This also allows us to more easily maintain interoperability with our neighboring mutual aid agencies, including Harris County.

The City is confident that there will be no interoperability relationships with other public safety agencies that will be negatively impacted by the Commission's grant of this waiver. Further, the City does not anticipate that any co-channel or adjacent channel licensees will be impacted by the City's continued operation at 25 kHz if the Commission grants this Waiver. The City commits to working with other licensees on a case-by-case basis to resolve any negative impact from the City's continued wideband operations during the waiver period.

The City requests that the Commission expeditiously grant this waiver request to continue operating on existing 25 kHz channels through August 31, 2013, in order to allow the City to complete the implementation of a new Project 25 Phase II 700MHz public safety communications network. This requested 8 month extension allows the City time to complete the system per the optimum milestone schedule shown above plus a reasonable time for schedule slippage and unforeseen setbacks, such as severe weather conditions, delay in availability of parts and equipment, software updates and public safety emergencies. The underlying purpose of the Commission's narrowbanding rule would not be frustrated by the Commission grant of this Waiver. The Waiver Request does not extend the date for narrow banding the City's 25 kHz operation to a lengthy or indefinite date, but instead petitions for a finite time extension to permit the implementation of a new interoperable citywide network.

V. CONCLUSION

As detailed above, The City of Houston, Texas believes we have shown that a grant of this Waiver Request for an 8 month period would be in the public interest, could actually promote extended interoperability with neighboring Counties and agencies, not harm any other licensee, and not frustrate the Commission's underlying goals of its narrowbanding order. The City urges the Commission to recognize that we are in process of implementing a new Project 25 Phase II 700MHz digital simulcast system and that we have no other viable alternative than to proceed with the plans currently in place.

The City respectfully requests that the Commission expeditiously grant this Waiver Request to continue operating on existing 25 kHz channels through August 31, 2013, to allow the City to complete the implementation of a new citywide Project 25 fully digital public safety communications network.

Respectfully submitted,

/s/

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